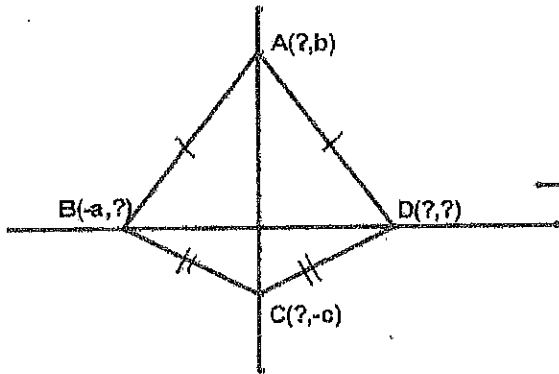


5.1 Coordinate Geometry WS

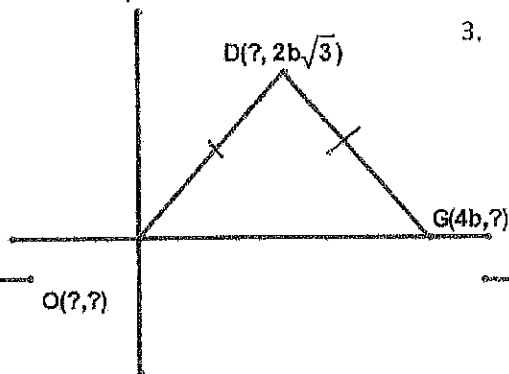
Name _____

What are the coordinates of the following figures?

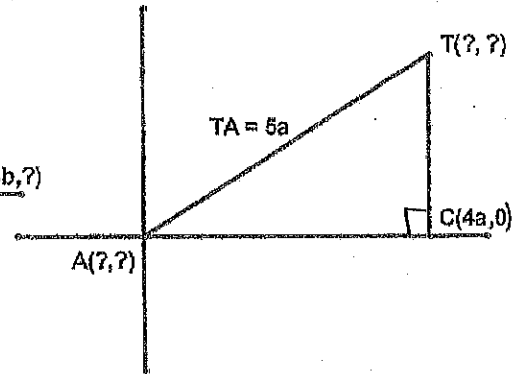
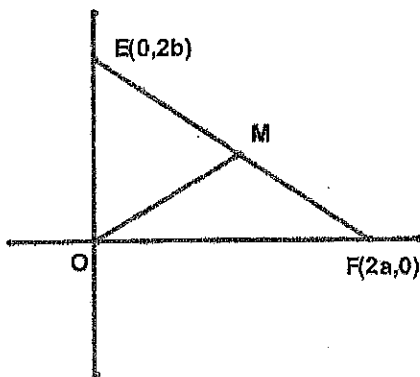
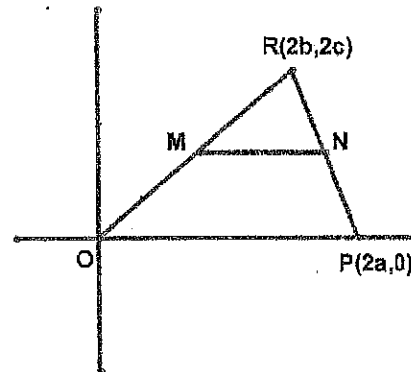
1.



2.

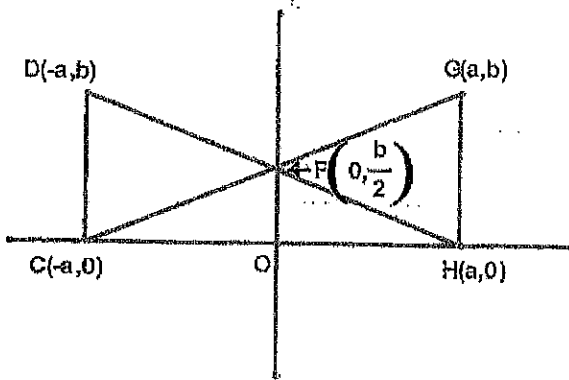


3.

4. Given: $\triangle OEF$ is a right triangle.M is the midpoint of \overline{EF} .Prove: $EM = FM = OM$.5. Given: \overline{MN} is the midsegment of $\triangle ORP$ Prove: $\overline{MN} \parallel \overline{OP}$, $MN = \frac{1}{2}(OP)$ 

6. Given: diagram

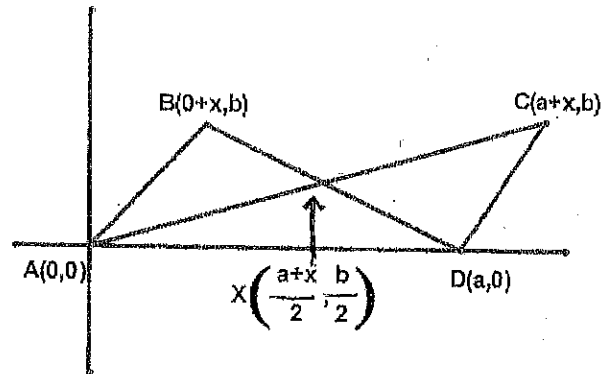
Prove: $\triangle FGH \cong \triangle FDC$



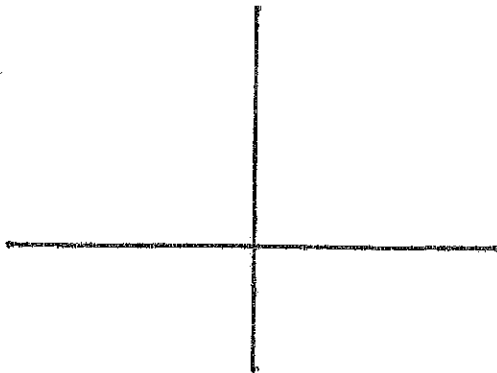
7. ^{Skip}

Given: diagram

Prove: $\triangle ABX \cong \triangle CDX$



8. Write a coordinate proof for the statement: ~~The measure of the segment that joins the vertex of the right angle in a right triangle to the midpoint of the hypotenuse is one-half the measure of the hypotenuse.~~

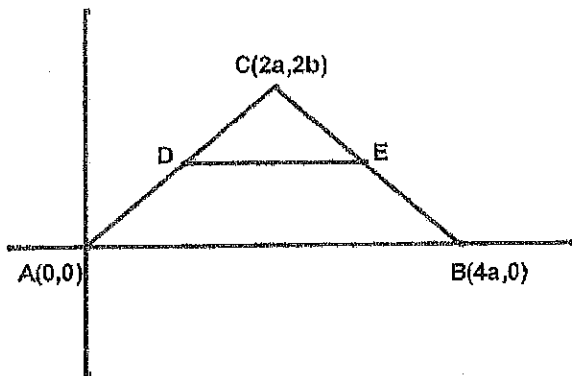


G: Isosceles $\triangle ABC$ (A is vertex angle)
M is the midpoint \overline{BC}

P: $\overline{AM} \perp \overline{BC}$

9. Given: \overline{DE} is the midsegment of isosceles $\triangle ABC$.

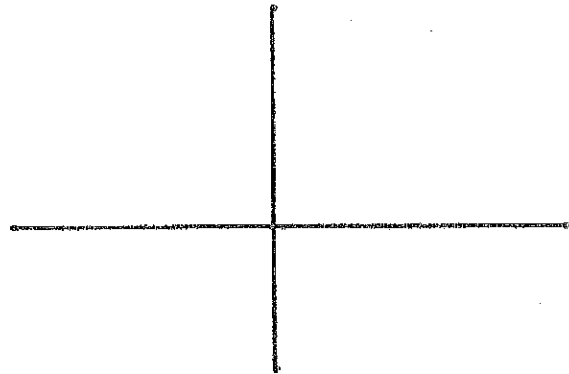
Prove: $\overline{AD} \cong \overline{BE}$



10. Given: $\triangle ABC$ is isosceles.

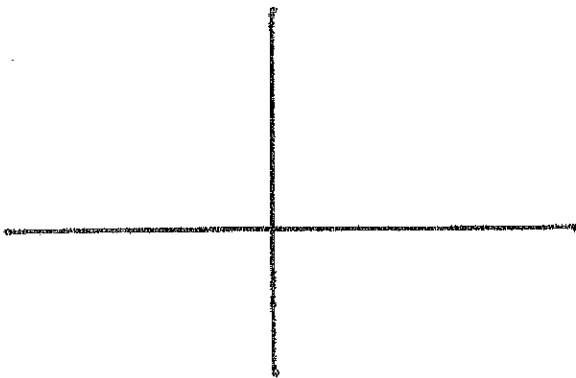
\overline{DE} , \overline{DF} , and \overline{EF} are midsegments of $\triangle ABC$.

Prove: $\triangle DEF$ is isosceles. (Draw your own diagram!)



Draw $\triangle XYZ$ and determine whether it is a right triangle.

11. $X(0,0)$ $Y(2h,2h)$ $Z(4h,0)$



12. ^{Skip} $X(0,0)$ $Y(h,h)$ $Z(2h,0)$

